

REMARKS

The Examiner is thanked for the thorough consideration given the present application and the courtesies extended during the telephone interview on July 30, 2002. The Examiner agreed that the term "formed" and the like will be given patentable weight in method claims.

By this amendment, Applicant amends claims 1, 9, 19, and 21. Accordingly, claims 1-26 are pending in this application. Reexamination and reconsideration of the application in view of the foregoing amendments and the following remarks are respectfully requested.

The Examiner rejected claims 1, 2, 7, 9, 10, 23, and 24 under 35 U.S.C. § 102(b) as being unpatentable over Applicant's Figures 1C and 2 (AF); and rejected claims 3-6, 8, 11-18, 20, 22, 25, and 26 under 35 U.S.C § 103(a) as being unpatentable over Applicant's Figures 1C and 2 (AF) in view of Funada et al. (U.S. Patent No.5,696,388). Applicant respectfully traverses these rejections. Claims 19 and 21 were not rejected.

Claims 1, 9, 19, and 21 are allowable over the cited references in that claims 1, 9, 19, and 21 recite a combination of elements, including for example, forming a pixel array on the substrate in the first region, forming a driver on the substrate in the second region, forming a control unit on the substrate in the third region, wherein the pixel array, driver and control unit are formed simultaneously. The cited references, singly or in combination, do not teach or suggest at least these elements of the claimed invention.

Page 5 of the present specification recites "In the related art above, after forming the CPU circuit and the controller by a separate semiconductor process, on a wafer of single crystalline silicon, the CPU circuit and the controller consisting of a CPU, RAM, ROM, IC, resistors, capacitors, oscillators, connectors, are attached to a panel of the LCD in order to fabricate an SOP typed LCD."

Accordingly, Applicant respectfully submits that the structure implied by a controller formed on a wafer of single crystalline silicon in a first semiconductor process, and then

mounted to a panel of an LCD, formed in an entirely separate, second semiconductor process (see FIGS. 1C and 2 of the present Application), is not the same as, and therefore does not disclose, a structure implied by a controller formed on a substrate also having a pixel array and a driver formed thereon simultaneously.

Applicant respectfully submits that claims 1 and 9 and claims 2-8, 10-26, which depend from claims 1 and 9 are allowable over the cited references.

Applicants believe the foregoing amendments place the application in condition for allowance and early, favorable action is respectfully solicited. Should the Examiner deem that a telephone conference would further the prosecution of this application, the Examiner is invited to call the undersigned attorney at (202) 496-7371.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136. Please credit any overpayment to deposit Account No. 50-0911.

Respectfully submitted,

MCKENNA LONG & ALDRIDGE LLP

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By: Teresa M. Arroyo
Teresa M. Arroyo
Registration No: 50,015

1900 K Street, N.W.
Washington, D.C. 20006
Telephone: (202) 496-7500
Facsimile: (202) 496-7756



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MARKED UP VERSION OF AMENDED CLAIM CHANGES

Please amend the claims as follows (A marked-up version of the amended claims is attached):

1. (Amended) A method of fabricating a system-on-panel typed liquid crystal display, comprising:

providing a substrate including at least first, second and third regions;

forming a pixel array [formed] on the substrate in the first region;

forming a driver [formed] on the substrate in the second region; [and]

forming a control unit [formed] on the substrate in the third region, wherein the control unit includes switching devices having at least one active layer; and

wherein the pixel array, driver and control unit are formed simultaneously.

9. (Amended) A method of fabricating a system-on-panel typed liquid crystal display, comprising:

providing a substrate including at least first, second and third regions;

forming a pixel array [formed] on the substrate in the first region;

forming a driver [formed] on the substrate in the second region; [and]

forming a control unit [formed] on the substrate in the third region, wherein the control unit includes switching devices having at least one active layer formed of single crystalline silicon; and

wherein the pixel array, driver and control unit are formed simultaneously.

19. (Amended) A method of fabricating a system-on-panel liquid crystal display, comprising:

providing a substrate including at least first, second and third regions;

forming a pixel array [formed] on the substrate at the first region, the pixel array having an active layer including amorphous silicon;

forming a driver [formed] on the substrate at the second region, the driver having an active layer including polysilicon or single crystalline silicon; [and]

forming a control unit [formed] on the substrate at the third region, the control unit having an active layer including polysilicon or single crystalline silicon, wherein the control unit includes switching devices having at least one active layer; and

wherein the pixel array, driver and control unit are formed simultaneously.

21. (Amended) A method of fabricating a system-on-panel liquid crystal display, comprising:

providing a substrate including at least first, second and third regions;

forming a pixel array [formed] on the substrate at the first region, the pixel array having an active layer including amorphous silicon;

forming a driver [formed] on the substrate at the second region, the driver having an active layer including polysilicon or single crystalline silicon; [and]

forming a control unit [formed] on the substrate at the third region, wherein the control unit includes switching devices having at least one active layer formed of single crystalline silicon; and

wherein the pixel array, driver and control unit are formed simultaneously.